#### § 153.250

this part must meet the requirements in §38.05-20 of this chapter. However, the vapor barrier required by §38.05-20(b) is unnecessary if the insulation is:

- (a) Protected from the weather, and attached to a containment system maintained at a temperature in excess of 46 °C (approx. 115 °F); or
- (b) In an atmosphere whose dewpoint is less than the temperature of any surface in contact with the insulation.

### CARGO TANKS

# §153.250 Double-bottom and deep tanks as cargo tanks.

Except in those cases in which Commandant (G-MSO) specifically approves another arrangement, such as a double-bottom or deep tank as a cargo tank, an integral cargo tank or the hold within which an independent cargo tank is located must extend to the weatherdeck.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983]

### §153.251 Independent cargo tanks.

All independent cargo tank must meet \$38.05-10 (a)(1), (b), (d), and (e)(1) of this chapter.

[CGD 78–128, 47 FR 21208, May 17, 1982]

# §153.252 Special requirement for an independent cargo tank.

When Table 1 refers to this section, the cargo tank must be an independent tank that meets  $\S 38.05-2(d)$  and 38.05-4(g) of this chapter. (See also  $\S 153.256(b)$ ).

[CGD 78-128, 47 FR 21208, May 17, 1982]

# §153.254 Cargo tank access.

- (a) A cargo tank must have at least one covered manhole opening into the vapor space described in §153.354.
- (b) An access through a vertical cargo tank surface must be at least 60 cm by 80 cm (approx.  $23.6 \times 31.5$  in.) and no more than 60 cm above a foothold grating, or surface on both sides of the access way.
- (c) An access through a horizontal cargo tank surface must be at least 60 cm by 60 cm (approx.  $23.6 \times 23.6$  in.).

(d) An access trunk must be no less than  $76~{\rm cm}$  (approx.  $29.9~{\rm in.}$ ) in diameter.

# §153.256 Trunks, domes, and openings of cargo tanks.

- (a) The hatch of a cargo tank must:
- (1) Be at the highest point of the tank; and
- (2) Open on or above the weatherdeck.
- (b) To be endorsed to carry a cargo requiring an independent cargo tank, a tank must have:
- (1) A trunk or dome at the uppermost part of the tank, extending above the weatherdeck;
- (2) Its hatch at the top of the trunk or dome; and
- (3) No openings below the weatherdeck.

# §153.266 Tank linings.

A tank lining must be:

- (a) At least as elastic as the tank material; and
- (b) Applied or attached to the tank as recommended by the lining manufacturer.

PIPING SYSTEMS AND CARGO HANDLING EQUIPMENT

## §153.280 Piping system design.

- (a) Each cargo piping system must meet the standards of Part 56 and §§ 38.10–1(b), 38.10–1(e), and 38.10–10(a) of this chapter.
- (b) Piping carrying cargo or cargo residue may not enter any machinery space except a cargo pumproom.

### §153.281 Piping to independent tanks.

Piping for an independent cargo tank must penetrate the tank only through that part of the tank or dome extending above the weatherdeck.

[CGD 78-128, 47 FR 21208, May 17, 1982]

### §153.282 Cargo filling lines.

The discharge point of a cargo tank filling line must be no higher above the bottom of the cargo tank or sump than 10 cm (approx. 4 in.) or the radius of the filling line, whichever is greater.